DEC 1 i 2003 P

SEQUENCE LISTING

```
<110> Kay, Peter H.
<120> Use of Fluorescent Molecular Beacons in the Detection of
Methylated Nucleic Acids
<130> 47675-52
<140> US 10/617,060
<141> 2003-07-08
<150> US 09/920,000
<151> 2001-07-31
<150> PCT/AU00/00053
<151> 2000-02-01
<160> 15
<170> PatentIn version 3.1
<210> 1
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Myf-3 gene target sequence
<400> 1
geggegacte egaegegtee agecegeget ee
32
<210> 2
<211>
      35
<212>
      DNA
<213> Unknown
<220>
<223> Myf-3 gene target sequence
<400> 2
ttataccgca ggcgggcgag ccgcgggcgc tcgct
35
<210> 3
<211> 35
<212>
      DNA
<213>
      Unknown
<220>
<223> Myf-3 gene target sequence
<400> 3
```

```
ccgagagccc tgcggggccc gccctcctgc tggcg
35
<210> 4
<211> 37
<212> DNA
<213> Unknown
<220>
<223> Glutathione-S-transfersse gene target sequence
<400> 4
ctccagcgaa ggcctcgcgg cctccgagcc ttataag
<210> 5
<211> 34
<212> DNA
<213> Unknown
<220>
<223> Glutathione-S-transfersse gene target sequence
<400> 5
ggggacgcgg gccgcgcgta ctcactggtg cgca
34
<210> 6
<211> 30
<212> DNA
<213> Unknown
<220>
<223> Molecular beacon A
<400> 6
cgaggcggc tggacgcgtc ggaggcctcg
<210> 7
<211> 28
<212> DNA
<213> Unknown
<220>
<223> Molecular beacon B
<400> 7
cgaggggct ggacgcgtcg gagcctcg
```

```
<211> 19
<212> DNA
<213> Unknown
<220>
<223> Complementary strand of molecular beacon A
<400> 8
ctccgacgcg tccagcccg
19
<210> 9
<211> 18
<212> DNA
<213> Unknown
<220>
<223> Complementary strand of molecular beacon B
<400> 9
ctccgacgcg tccagccc
18
<210> 10
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Preferred methylated Myf-3 target sequence
<220>
<221> modified base
<222> (2)..(2)
<223> m5c
<220>
<221> modified_base
<222> (5)..(5)
<223> m5c
<220>
<221> modified_base
<222> (11)..(11)
<223> m5c
<220>
<221> modified_base
<222> (14)..(14)
<223> m5c
```

. .

```
<220>
<221> modified_base <222> (16)..(16)
<223> m5c
<220>
<221> modified base
<222> (25)..(25)
<223> m5c
<220>
<221> modified_base
<222> (27)..(27)
<223> m5c
<400> 10
geggegacte egacgegtee agecegeget ee
32
<210> 11
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Methylated Myf-3 target oligonucleotide
<220>
<221> modified base
\langle 222 \rangle (11)..(1\overline{1})
<223> m5c
<220>
<221> modified base
<222> (14)..(14)
<223> m5c
<220>
<221> modified_base
\langle 222 \rangle (16)..(1\overline{6})
<223> m5c
<220>
<221> modified base
\langle 222 \rangle (25)...(25)
<223> m5c
<220>
<221> modified_base
```

```
<222> (27)..(27)
<223> m5c
<400> 11
gcggcgactc cgacgcgtcc agcccgcgct cc
32
<210> 12
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Methylated Myf-3 target oligonucleotide
<220>
<221> modified base
<222> (14)..(14)
<223> m5c
<220>
<221> modified_base
<222> (16)..(16)
<223> m5c
<220>
<221> modified_base
\langle 222 \rangle (25)...(25)
<223> m5c
<220>
<221> modified base
<222> (27)..(27)
<223> m5c
<400> 12
geggegacte egacgegtee agecegeget ee
32
<210> 13
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Methylated Myf-3 target oligonucleotide
<220>
<221> modified_base
<222> (16)..(16)
```

..

```
<223> m5c
<220>
<221> modified base
<222> (25)..(25)
<223> m5c
<220>
<221> modified base
<222> (27)..(27)
<223> m5c
<400> 13
geggegacte egacgegtee agecegeget ee
32
<210> 14
<211> 32
<212> DNA
<213> Unknown
<220>
<223> Methylated Myf-3 target oligonucleotide
<220>
<221> modified_base
\langle 222 \rangle (25)...(25)
<223> m5c
<220>
<221> modified_base
\langle 222 \rangle (27)...(27)
<223> m5c
<400> 14
geggegacte egacgegtee agecegeget ee
<210> 15
<211> 32
<212> DNA
<213> Unknown
<220>
       Methylated Myf-3 target oligonucleotide
<223>
<220>
<221> modified base
\langle 222 \rangle (27) \dots (27)
<223> m5c
```

<400> 15 gcggcgactc cgacgcgtcc agcccgcgct cc 32